

## Abstract of the Disclosure

There is provided a product shape designing device capable of designing a product appropriate for an individual human body shape by considering the designing restrictions of the product and the restrictions when matching the product to a human body. The product shape designing device includes: a measurement unit (101) for measuring a human body shape A, a human body shape B, and a product shape C; a pre-processing unit (102) for performing data conversion for expressing the human body shape A and the human body shape B with the same number of pieces and the same geographical structure coordinates; and a calculation unit (103). According to data on the human body shape A and the human body shape B subjected to the data conversion by the pre-processing unit and the product shape C, the calculation unit (103) calculates a deformation grating G to simultaneously minimize the error between the individuals of the human body shape A and the human body shape B and the error between the circumferential length of the cross section H decided from the product shape C and the design target value of the circumferential length of the cross section, so that the deformation grating G is applied to the product shape C so as to obtain a new product shape F appropriate for the human body shape B.